The listing of claims set forth below will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (Currently Amended) A method of ~~determining biliverdin concentration in a sample from~~ detecting hepatic function in an avian or reptilian ~~species~~ subject, comprising:

detecting substantially all of the biliverdin in a sample comprising

(a) contacting ~~the~~ a sample from an avian or reptilian subject with biliverdin reductase;

(b) measuring a change in an absorbance value in at least one wavelength between ~~at~~ about 325 to about 750 nm; and

(c) ~~determining biliverdin concentration~~ calculating the amount of substantially all of the biliverdin in the sample by comparing the changes in absorbance ~~value obtained in step b) with absorbance values on a standard concentration curve~~ with absorbance values for known biliverdin amounts.

2. (Previously presented) A method of ~~measuring increased biliverdin concentration in a sample from~~ detecting hepatic function in an avian or reptilian ~~species~~ subject, comprising:

(a) contacting ~~the~~ a sample from an avian or reptilian subject with biliverdin reductase; ~~and~~

(b) measuring a change in an absorbance value in at least two wavelengths between ~~at~~ about 325 nm to about 750 nm, ~~wherein a change in absorbance as compared to a control sample indicates increased biliverdin concentration in the sample,~~ and

(c) calculating the amount of substantially all of the biliverdin in a sample by comparing the changes in absorbance with absorbance values for known biliverdin amounts.

3.-10. (Canceled)

11. (New) The method of Claim 1, wherein measuring a change in an absorbance value in at least one wavelength comprises detecting the absorbance value at two fixed time points.

12. (New) The method of Claim 1, wherein measuring a change in an absorbance value in at least one wavelength comprises detecting the absorbance value continuously.

13. (New) The method of Claim 2, wherein measuring a change in an absorbance value in at least two wavelengths comprises detecting the absorbance value at two fixed time points.

14. (New) The method of Claim 2, wherein measuring a change in an absorbance value in at least two wavelengths comprises detecting the absorbance value continuously.

15. (New) The method of Claim 1, wherein the at least one wavelength is about 450, about 500, or about 660 nm.

16. (New) The method of Claim 2, wherein one of the at least two wavelengths is about 450 nm, about 500 nm, or about 660 nm.

17. (New) The method of Claim 2, wherein one of the at least two wavelengths is about 450 and a second wavelength is about 660 nm.

18. (New) The method of Claim 1, wherein the sample from an avian or reptilian subject is derived from blood, serum, urine, sputum, fine needle aspirations, or other biological fluids.

19. (New) The method of Claim 2, wherein the sample from an avian or reptilian subject is derived from blood, serum, urine, sputum, fine needle aspirations, or other biological fluids.

20. (New) The method of Claim 1, further comprising repeating steps (a) – (c) at least one time to obtain at least a second biliverdin amount, and assessing hepatic function by comparing the first biliverdin amount with at least a second biliverdin amount.

21. (New) The method of Claim 20, wherein the at least one wavelength is about 450, about 500, or about 660 nm.

22. (New) The method of Claim 2, further comprising repeating steps (a) – (c) at least one time to obtain at least a second biliverdin amount, and assessing hepatic function by comparing the first biliverdin amount with at least a second biliverdin amount.

23. (New) The method of Claim 22, wherein one of the at least two wavelengths is about 450 nm, about 500 nm, or about 660 nm.

24. (New) A method of monitoring the efficacy of drug therapy in an avian or reptilian subject, comprising:

detecting hepatic function in an avian or reptilian subject undergoing drug therapy comprising

(a) contacting a sample from an avian or reptilian subject with biliverdin reductase;

(b) measuring a change in an absorbance value,

(c) calculating the amount of substantially all of the biliverdin in a sample by comparing the changes in absorbance with absorbance values for known biliverdin amounts to obtain a first biliverdin amount;

(d) repeating steps (a) – (c) at least one time to obtain at least a second biliverdin amount;

assessing hepatic function by comparing the first biliverdin amount with at least a second biliverdin amount; and

optionally adjusting at least one aspect of the drug therapy.

25. (New) The method of Claim 24, wherein adjusting at least one aspect of the drug therapy comprises changing the drug, the dose, or the frequency of the drug therapy.

26. (New) The method of Claim 1, wherein when the amount of substantially all of the biliverdin in the sample is greater than or less than normal biliverdin amounts for that subject's species, the subject is diagnosed with a hepatic disease.

27. (New) The method of Claim 26, wherein the hepatic disease is hepatocellular swelling, hepatic fibrosis, hepatic inflammation, red cell hemolysis, bile duct inflammation or obstruction, erythrocyte destruction, or hemoglobin degradation.

28. (New) The method of Claim 2, wherein when the amount of substantially all of the biliverdin in the sample is greater than or less than normal biliverdin amounts for that subject's species, the subject is diagnosed with a hepatic disease.